AMENDMENT TO THE SPECIFICATION

Kindly amend the paragraph at page 25, lines 12-22 as follows:

Similar Adenovirus vectors, carrying different regulatory cell-fate inducing genes including Nurr1, PTX3, Phox2a, AP2, and/or Shh, are constructed and used to express their gene products in TESCs. Expression of these genes is monitored by Northern Analysis, Western Analysis and/or Immunohistochemical analysis. Protocols for the same may be found, for example, in Ausubel et al., *Current Protocols in Molecular Biology*, John Wiley & Sons, New York, NY, 1997 and in *Antibodies: A Laboratory Manual* (E. Harlow and D. Lane, Cold Spring Harbor Laboratory, cold Spring Harbor, NY, 1988). Details of the cell -fate inducing genes can be ~~accessed at: http: //www.ncbi.nlm.nih.gov/Pubmed/:~~ accessed at The National Center for Biotechnology Information; see below for Genebank Accession Numbers.

Kindly amend the paragraph beginning at page 27, line 7, as follows:

Thus, to isolate the desired lineage-specific neural progenitors, plasmid constructs will be made in which the bifunctional selection marker/reporter gene cassette b-geo [coding for both the b-galactosidase and the neomycin resistance gene; see Friedrich G and Soriano P, *Genes Dev.* 5: 1513, (1991)] will be cloned into the cell-specific gene of interest in ES cells, such that the b-galactosidase and the neomycin phosphotransferase genes are expressed in a cell-specific manner. At the 3' end of the cell-specific gene, a phosphoglycerate kinase-hygromycin (pGK-hygro) resistant gene will be cloned (see Mortensen RM et al., *Mol. Cell. Biol.* 12:2391, (1992)). The plasmid will be cut with restriction enzymes to linearize a fragment containing the 5' region of the cell-specific gene b -geo cassette-pGK-hygro cassette-3' sequence of the cell-specific gene. The linearized fragment will be electroporated into ES cells (see Klug MG et al., *J. Clin. Invest.* 98 :21, (1996); Li ML et al., *Curr. Biol.* 8: 971, (1998). Transfected clones will be selected by growth in the presence of 200 mg/ml hygromycin (Calbiochem, La Jolla, CA). Transfected ES cells will be cultured (see Smith AG et al., *J Tissue Culture Methods* 13: 89, (1991)) in Dulbecco's modified Eagle's medium (DMEM) (GIBCO/BRL, Grand Island, NY) containing 10% fetal bovine serum (FBS) (GIBCO/BRL), 1% nonessential amino acids (GIBCO/BRL), 0.1 mmol/l 2- mercaptoethanol (GIBCO/BRL), 1 mmol/l sodium pyruvate, 100 IU/ml penicillin, and 0.1 mg/ml streptomycin. The undifferentiated state will be maintained by 1,000 U/ml recombinant leukemia inhibitory factor (LIF) (GIBCO/BRL). To induce differentiation, hygromycin resistant ES cells will be plated onto a 100-mm bacterial Petri dish containing 10 ml of DME lacking supplemental LIF. After 3 d in suspension culture, the resulting embryoid bodies will be plated onto plastic 100-mm cell culture dishes and allowed to attach. The differentiated cultures will be grown in the presence of G418 (200 μg/ml;Gibco Laboratories, Grand Island, NY), resulting in selection of cell-specific ES cells. Expression of cell-specific genes is monitored by Northern Analysis, Western Analysis and/or Immunohistochemical

analysis. Protocols for the same may be found, for example, in Ausubel et al., *Current Protocols in Molecular Biology*, John Wiley & Sons, New York, NY, 1997 and in *Antibodies: A Laboratory Manual* (E. Harlow and D. Lane, Cold Spring Harbor Laboratory, cold Spring Harbor, NY, 1988). Details of the cell-specific genes can be accessed at: ~~http://www.ncbi.nlm.nih.gov/Pubmed/.~~ The National Center for Biotechnology Information; see below for Genebank Accession Numbers.